

## Washington University, St. Louis, BIRCWH Publications and Abstracts

Bettina Mittendorfer, PhD

### Original, peer-reviewed

1. B. Mittendorfer, J.F. Horowitz, S. Klein. Gender differences in lipid and glucose kinetics during short-term fasting. *Am. J. Physiol.* 281:E1333-1339, 2001.
2. B. Mittendorfer, R. Ostlund Jr., B.W. Patterson, S. Klein. Orlistat inhibits dietary cholesterol absorption. *Obes. Res.* 9:599-604, 2001.
3. B.W. Patterson, B. Mittendorfer, N. Elias, R. Satyanarayana, S. Klein. Use of stable isotopically labeled tracers to measure very low density lipoprotein-triglyceride turnover. *J. Lipid Res.* 43:223-233, 2002.
4. B. Mittendorfer, J.F. Horowitz, S. Klein. Effect of gender on lipid metabolism during endurance exercise of moderate intensity in untrained subjects. *Am. J. Physiol. Endocrinol. Metab.* 283:E58-64, 2002.
5. B. Mittendorfer, B. W. Patterson, S. Klein. Effects of sex and obesity on basal VLDL-triacylglycerol kinetics. *Am. J. Clin. Nutr.* 77:1-7, 2003.
6. B. Mittendorfer, B. W. Patterson, S. Klein. Effect of weight loss on VLDL-triglyceride and apolipoprotein-B-100 kinetics in women with abdominal obesity. *Am. J. Physiol. Endocrinol. Metab.* 284:E549-556, 2003.
7. B. Mittendorfer, B.W. Patterson, S. Klein, L.S. Sidossis. VLDL-triglyceride kinetics during hyperglycemia-hyperinsulinemia: effects of sex and obesity. *Am. J. Physiol. Endocrinol. Metab.* 284:E708-715, 2003.
8. B. Mittendorfer, O. Liem, B. W. Patterson, J.M. Miles, S. Klein. What does the measurement of whole-body fatty acid rate of appearance really mean? *Diabetes* 52:1641-1648, 2003.
9. D.N. Reeds, B. Mittendorfer, B.W. Patterson, K.E. Yarasheski, W. Powderly W, S. Klein. Alterations in lipid kinetics in men with HIV-lipodystrophy. *Am. J. Physiol. Endocrinol. Metab.* 285:E490-497, 2003.
10. B. Mittendorfer, D.A. Fields, S. Klein. Excess body-fat in men decreases plasma fatty acid availability and oxidation during endurance exercise, *Am. J. Physiol. Endocrinol. Metab.* (in press).

### Reviews

1. B. Mittendorfer and S. Klein. Effect of aging on glucose and lipid metabolism during endurance exercise. *Int. J. Sport Nutr. Ex. Metab.* 11:S84-89, 2001.
2. B. Mittendorfer and S. Klein. Physiological factors that regulate the use of endogenous fat and carbohydrate fuels during endurance exercise. *Nutr. Res. Rev.* 16:97-108, 2003.
3. B. Mittendorfer. Relationship between glucose metabolism and plasma lipid kinetics in health and disease. *Curr. Opin. Nutr. Metab. Care* (in press).

Ongoing projects/Meeting abstracts

1. Fibrinogen synthesis in lean and obese women: basal values and response to weight reduction. B. Mittendorfer, S. Samaddar, B.W. Patterson, S. Klein. European Society for Parenteral and Enteral Nutrition, Salzburg, Austria, 2003.
2. VLDL-TG kinetics in response to endurance exercise. B. Mittendorfer, B.W. Patterson, S. Klein. Society for Experimental Biology and Medicine, Washington, DC 2004.

**Linda Peterson, MD**

Manuscripts:

1. **Peterson LR**, Waggoner AD, Schechtman KB, Meyer T, Gropler RJ, Klein S, Barzilai B, Davila-Roman VG. Otherwise healthy obese young women demonstrate concentric left ventricular remodeling and diastolic and systolic dysfunction. *J Am Coll Cardiol* 2003 (accepted).
2. **Peterson LR**, Herrero P, Schechtman KB, Racette S, Klein S, Marsala J, Gropler RJ: Effect of obesity on myocardial blood flow and substrate metabolism. *Circulation* 2003 (submitted).

Abstracts:

1. **Peterson LR**, Waggoner AD, Meyer T, Gropler RJ, Perez JE, Johnston D, Davila-Roman VG: Tissue Doppler imaging detects systolic and diastolic abnormalities in young obese women. *J Am Soc Echocardiogr* (Abstract) 15:S59, 2002.
2. **Peterson LR**, Waggoner AD, Herrero P, Racette S, Marsala J, Meyer T, Klein S, Davila-Roman VG, Gropler RJ: Increasing body mass index is associated with decreased myocardial efficiency in young women. *J Am Coll Cardiol* (Abstract) accepted, 2003.
3. **Peterson LR**, Waggoner AD, Herrero P, Racette S, Meyer T, de las Fuentes L, Klein S, Davila-Roman VG, Gropler RJ: Glucose intolerance and obesity alter myocardial metabolism in young women. *J Am Coll Cardiol* (Abstract) accepted, 2003.
4. **Peterson LR**, Herrero P, Kisrieva-Ware Z, Dence C, Marsala, J, Gropler, RJ: Impact of increased fatty acid delivery on myocardial fatty acid metabolism in obese young women. *J Am Coll Cardiol* (Abstract) accepted, 2004.

**Reina Villareal, MD**

1. Napoli N, Sheik S, Cagaanan M, Rini G, Civitelli R, **Villareal R**: G1294C polymorphism of the CYP1B1 gene is associated with altered estrogen metabolism and bone density phenotypes

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2. Napoli N, Sheikh S, Mumm S, Baldus C, James J, Mueller C, Fryer J, Klug T, Rini GB, Civitelli R, **Armamentor-Villareal RC**: C4887A polymorphism of the CYP1A1 gene conditions estrogen metabolism and bone density

3. Napoli N, Sheik S, Cagaanan M, Mumm S, Rini GB, **Armamento-Villareal R**: The role of CYP1A1 gene polymorphisms on estrogen metabolism and bone mass

### **W. Timothy Schaiff, PhD**

#### Publications

1. Bildirici I, Roh C-R, **Schaiff WT**, Lewkowski BM, Nelson DM, Sadovsky Y: The lipid droplet associated protein adipophilin is expressed in human trophoblasts, and is regulated by PPAR $\gamma$ /RXR. *J Clin Endocrinol Metabol* *In press*.
2. Budhraja V, Spitznagel E, **Schaiff WT**, Sadovsky Y. Incorporation of gene-specific variability improves expression analysis using high-density DNA microarrays. *BMC Biology*. *In press*.

#### Abstracts

1. **Schaiff WT**, Cheong M, Chern PL, Schild RL, Nelson DM, Sadovsky Y. Peroxisome proliferator activated receptor (PPAR) $\gamma$  regulates fatty acid uptake in human placental trophoblasts. *2002 Society for Gynecological Investigation Annual Meeting*.
2. Schild RL, **Schaiff WT**, Nelson DM, Sadovsky Y. The MAP kinase p38 $\alpha$  is an important regulator of peroxisome proliferator activated receptor (PPAR) $\gamma$  in primary human trophoblasts. *2002 Society for Gynecological Investigation Annual Meeting*.
3. Sadovsky Y, Sadovsky E, **Schaiff WT**, Nelson DM. Determination of hypoxia-induced placental gene expression using cross-analysis of DNA microarrays from placentas of growth restricted fetuses and hypoxic trophoblasts *in vitro*. *2002 Society for Gynecological Investigation Annual Meeting*.
4. Bildirici I, **Schaiff WT**, Roh C-R, Lewkowski B, Nelson DM, Sadovsky Y. The lipid-associated protein adipophilin is expressed in primary human trophoblasts, and regulated by PPAR $\gamma$ /RXR. *2003 Society for Gynecological Investigation Annual Meeting*.
5. Humphrey RG, **Schaiff WT**, Smith SD, Sadovsky Y, Nelson DM. PPAR $\gamma$  and hypoxia exhibit opposing effects on differentiation of term human primary trophoblasts. *2003 Society for Gynecological Investigation Annual Meeting*.
6. Sadovsky Y, Budhraja V, Bildirici I, Roh C-R, **Schaiff WT**, Nelson DM. A novel, microarray-based methodology identifies altered gene expression in hypoxic placentas. *2003 Society for Maternal-Fetal Medicine Annual Meeting*.

Polonsky, Kenneth S.  
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7. **Schaiff WT**, Bildirici I, D. Michael Nelson DM, Sadovsky Y. Peroxisome proliferator activated receptor gamma and retinoid X receptor regulate fatty acid uptake by human trophoblasts. 2003 *International Federation of Placenta Associations/European Placental Group 2003 Meeting*.

**Prabha Ranganathan, MD**

1. Ranganathan P, Culverhouse R, Marsh S, Ahluwalia R, Shannon W, Eisen S, McLeod H: Single nucleotide polymorphism profiling across the methotrexate pathway in normal subjects and patients with rheumatoid arthritis